

# **Global Nitrous Oxide Market Size Study, by Application (Automotive, Medical, Electronics, Food & Beverages, Others), and Regional Forecasts 2022-2032**

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## **Abstracts**

The Global Nitrous Oxide Market is valued approximately at USD 1.49 billion in 2023 and is anticipated to grow with a healthy growth rate of more than 7.90% over the forecast period 2024-2032. Nitrous oxide, colloquially known as 'laughing gas,' has carved a multifaceted role across diverse industries, ranging from automotive propulsion systems to medical anesthesia and food preservation. As a compound characterized by its unique physical and chemical properties, nitrous oxide has become indispensable in applications where reliability, stability, and precision are paramount. With an ever-expanding demand across its diverse end-use industries, the market is poised for consistent growth.

The market's momentum is largely driven by advancements in medical technology and the expanding scope of healthcare services globally. The widespread adoption of nitrous oxide in surgical and dental procedures as a mild anesthetic and analgesic reflects its critical role in modern medicine. Simultaneously, the automotive industry leverages the compound's oxidizing properties to enhance engine performance in high-stakes motorsports. Notably, the food and beverage sector has witnessed a surge in the use of nitrous oxide as a propellant for whipped cream dispensers and as a preservative to extend the shelf life of packaged products. However, stringent environmental regulations and concerns over the greenhouse potential of nitrous oxide could impose challenges to market expansion.

Regionally, North America dominates the global market, with its advanced healthcare infrastructure, robust automotive industry, and burgeoning food and beverage sector.

The region benefits from continuous innovation and favorable regulatory frameworks, sustaining its leadership position. Meanwhile, the Asia Pacific region is forecasted to exhibit the fastest growth, fueled by rapid industrialization, a burgeoning middle-class population, and increasing investments in healthcare and automotive sectors. Key players in emerging economies such as China and India are actively contributing to the market's dynamism.

Major market players included in this report are:

Praxair, Inc.

Air Liquide S.A.

Linde Group

Air Products and Chemicals, Inc.

Taiyo Nippon Sanso Corporation

Matheson Tri-Gas, Inc.

Ellenbarrie Industrial Gases Ltd.

Messer Group GmbH

SOL S.p.A.

Gujarat Fluorochemicals Ltd.

Honeywell International Inc.

Kanto Denka Kogyo Co., Ltd.

Nippon Ekitan Corporation

Yara International ASA

WestAir Gases & Equipment, Inc.

The detailed segments and sub-segment of the market are explained below:

By Application:

Automotive

Medical

Electronics

Food & Beverages

Others

By Region:

North America

U.S.

Canada

Europe

UK

Germany

France

Spain

Italy

Rest of Europe

## Asia Pacific

China

India

Japan

Australia

South Korea

Rest of Asia Pacific

## Latin America

Brazil

Mexico

## Middle East & Africa

Saudi Arabia

South Africa

Rest of Middle East & Africa

Years considered for the study are as follows:

Historical year – 2022

Base year – 2023

Forecast period – 2024 to 2032

## Key Takeaways:

Market Estimates & Forecast for 10 years from 2022 to 2032.

Annualized revenues and regional level analysis for each market segment.

Detailed analysis of geographical landscape with country-level insights into major regions.

Competitive landscape featuring insights on major players in the market.

Recommendations on business strategies and future approaches.

Analysis of competitive dynamics and demand-supply trends.

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